**Copied from Statistics syllabus**

**Student Learning Outcomes/Semester Schedule**

**Chapter 1 –Exploring Data week 1, 2**

* Display distributions with graphs
* Describe distributions with numbers

**Chapter 2 –The Normal Distribution week 3, 4**

* Find area of density curves
* Evaluate quantities using the normal distribution
* Evaluate data using standard normal calculations

**Chapter 3 –Examining Relationships week 4, 5**

* Create and analyze scatterplots
* Analyze data using correlation
* Predict using least squares regression

**Chapter 4 –More on Two –Variable Data week 6,7,8**

* Transform relationships logarithmically
* Understand cautions regarding correlation and regression
* Analyze relations in categorical data

**Chapter 5 –Producing Data week 9, 10, 11**

* Design samples
* Design experiments
* Simulate experiments

**Chapter 6 –Probability week 12,13,14**

* Apply the counting principles
* Develop probability models
* Apply general probabily rules

**Chapter 7 –Random Variables week 15,16,17**

* Distinguish between discrete and continuous random variables
* Find means and variances of random variables

**Chapter 8 –The Binomial and Geometric Distributions week 18,19,20**

* Recognize and solve problems using the binomial distribution
* Recognize and solve problems using the geometric distribution

**Chapter 9 –Sampling Distributions week 21, 22**

* Evaluate data using sampling distributions
* Relate sample proportions and sample means

**Chapter 10 –Introduction to Inference week 23,24,25**

* Estimate with confidence
* Draw conclusions based on tests of significance
* Make sense of statistical significance
* Use inference to make decisions

**Chapter 11 –Inference for Distributions week 26,27,28**

* Analyze inference for the mean of a population
* Compare two means

**Chapter 12 –Inference for Proportions week 29,30,31**

* Analyze inference for a population proportion
* Compare two proportions

**Chapter 13 –Inference for Tables week 32,33**

* Use chi-square for goodness of fit
* Use chi-square for two-way tables

**Chapter 14 –Inference for Regression week 34,35**

* Analyze inference about the model
* Make predictions and understand conditions